

```
graph TD; 202[PROBLEM IDENTIFICATION] --> 203[Assessment]; 202 --> 204[PROBLEM PRIORITIZATION]; 204 --> 205[Assessment]; 204 --> 206[DETAILED ASSESSMENT & SOLUTION];
```

The flowchart illustrates a process for problem identification and assessment. It begins with a box labeled "PROBLEM IDENTIFICATION" (202). From this box, an arrow points to a box labeled "Assessment" (203). Another arrow points from "PROBLEM IDENTIFICATION" down to a box labeled "PROBLEM PRIORITIZATION" (204). From "PROBLEM PRIORITIZATION", an arrow points to a box labeled "Assessment" (205). A final arrow points from "PROBLEM PRIORITIZATION" down to a box labeled "DETAILED ASSESSMENT & SOLUTION" (206).

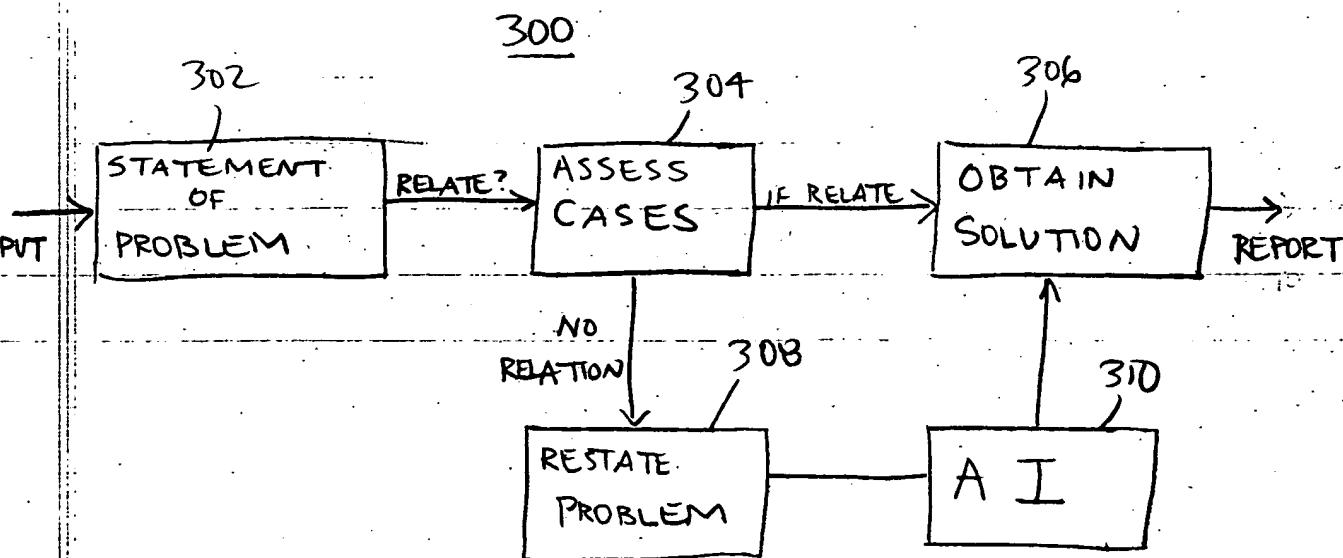
[illegible]

FIG. 3

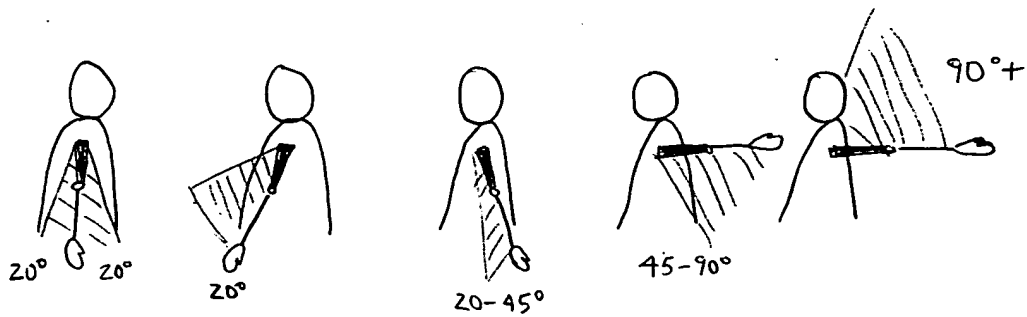


FIG. 7

TASK/ACTION	Right	Left	Remove
R-1 Cutting of large shells			
Grasp shell		1	
Place shell on lathe		5	
Remove while rotating shell		5	
Replace shell		1	
Lower lever	5		
Raise lever	5		
R-2 Cutting of small shells			
Grasp shell		1	
Place shell on lathe		9	
Remove while rotating shell		9	

FIG. 4

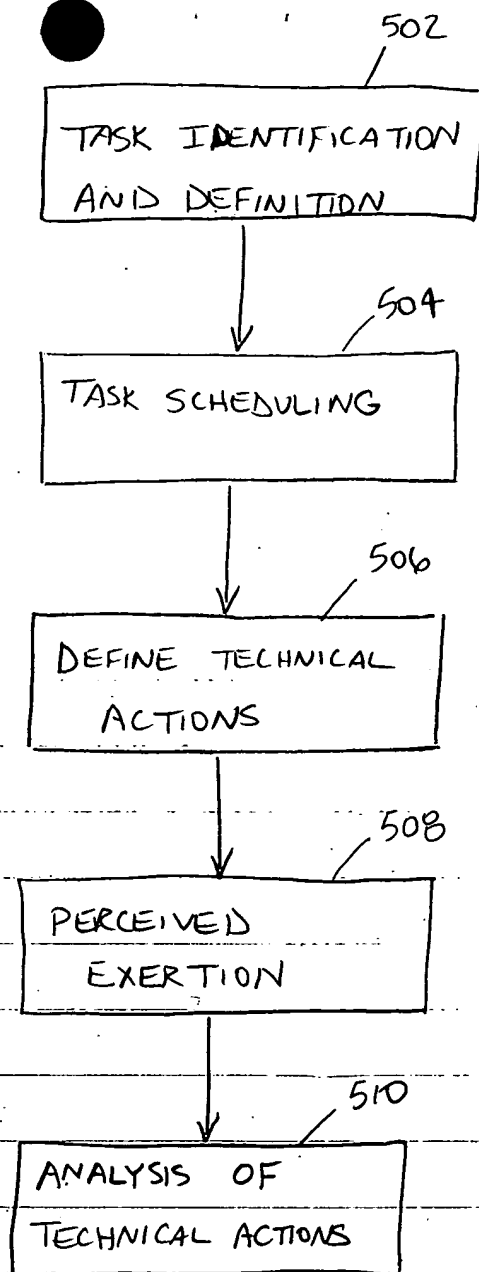


FIG. 5

0	NOTHING AT ALL
0.5	VERY, VERY WEAK (JUST NOTICEABLE)
1	VERY WEAK
2	WEAK (LIGHT)
3	MODERATE
4	SOMEWHAT STRONG
5	STRONG HEAVY
6	
7	VERY STRONG
8	
9	
10	VERY, VERY STRONG (ALMOST MAXIMUM)

FIG. 6

0971048-1100

000710438-111000

Shoulder Positions and Movements - Left Side

Abduction	<input checked="" type="checkbox"/>	n/a	<input checked="" type="checkbox"/>	1/3	<input checked="" type="checkbox"/>	2/3	<input checked="" type="checkbox"/>	3/3
Flexion	<input checked="" type="checkbox"/>	n/a	<input checked="" type="checkbox"/>	1/3	<input checked="" type="checkbox"/>	2/3	<input checked="" type="checkbox"/>	3/3
Extension	<input checked="" type="checkbox"/>	n/a	<input checked="" type="checkbox"/>	1/3	<input checked="" type="checkbox"/>	2/3	<input checked="" type="checkbox"/>	3/3

☐ Performs work gestures of the same type involving the shoulder for more than 50% of the cycle/task time?

☐ Keeps the arm raised (unsupported) by an angle more than 60 degrees or in extension for at least 10 sec. consecutively once every cycle (short cycle). For longer cycle time increase proportionately the time of the static contraction.

☐ Keeps the arm raised (unsupported) at 60 degrees for > 1 minute

Shoulder Positions and Movements - Right Side

Abduction	<input checked="" type="checkbox"/>	n/a	<input checked="" type="checkbox"/>	1/3	<input checked="" type="checkbox"/>	2/3	<input checked="" type="checkbox"/>	3/3
Flexion	<input checked="" type="checkbox"/>	n/a	<input checked="" type="checkbox"/>	1/3	<input checked="" type="checkbox"/>	2/3	<input checked="" type="checkbox"/>	3/3
Extension	<input checked="" type="checkbox"/>	n/a	<input checked="" type="checkbox"/>	1/3	<input checked="" type="checkbox"/>	2/3	<input checked="" type="checkbox"/>	3/3

☐ Performs work gestures of the same type involving the shoulder for more than 50% of the cycle/task time?

☐ Keeps the arm raised (unsupported) by an angle more than 60 degrees or in extension for at least 10 sec. consecutively once every cycle (short cycle). For longer cycle time increase proportionately the time of the static contraction.

☐ Keeps the arm raised (unsupported) at 60 degrees for > 1 minute

Abduction Flexion Extension



Elbow Movements - Left Side

Supination	<input checked="" type="checkbox"/>	n/a	<input checked="" type="checkbox"/>	1/3	<input checked="" type="checkbox"/>	2/3	<input checked="" type="checkbox"/>	3/3
Pronation	<input checked="" type="checkbox"/>	n/a	<input checked="" type="checkbox"/>	1/3	<input checked="" type="checkbox"/>	2/3	<input checked="" type="checkbox"/>	3/3
Flexion	<input checked="" type="checkbox"/>	n/a	<input checked="" type="checkbox"/>	1/3	<input checked="" type="checkbox"/>	2/3	<input checked="" type="checkbox"/>	3/3

☐ Performs work gestures of the same type involving the Elbow for more than 50% of the cycle?

Elbow Movements - Right Side

Supination	<input checked="" type="checkbox"/>	n/a	<input checked="" type="checkbox"/>	1/3	<input checked="" type="checkbox"/>	2/3	<input checked="" type="checkbox"/>	3/3
Pronation	<input checked="" type="checkbox"/>	n/a	<input checked="" type="checkbox"/>	1/3	<input checked="" type="checkbox"/>	2/3	<input checked="" type="checkbox"/>	3/3
Flexion	<input checked="" type="checkbox"/>	n/a	<input checked="" type="checkbox"/>	1/3	<input checked="" type="checkbox"/>	2/3	<input checked="" type="checkbox"/>	3/3

☐ Performs work gestures of the same type involving the Elbow for more than 50% of the cycle?



FIG. 8A

Wrist Positions and Movements - Left Side

Extension	<input checked="" type="checkbox"/>	n/a	<input checked="" type="checkbox"/>	1/3	<input checked="" type="checkbox"/>	2/3	<input checked="" type="checkbox"/>	3/3
Flexion	<input checked="" type="checkbox"/>	n/a	<input checked="" type="checkbox"/>	1/3	<input checked="" type="checkbox"/>	2/3	<input checked="" type="checkbox"/>	3/3
Radial Deviation	<input checked="" type="checkbox"/>	n/a	<input checked="" type="checkbox"/>	1/3	<input checked="" type="checkbox"/>	2/3	<input checked="" type="checkbox"/>	3/3
Ulnar Deviation	<input checked="" type="checkbox"/>	n/a	<input checked="" type="checkbox"/>	1/3	<input checked="" type="checkbox"/>	2/3	<input checked="" type="checkbox"/>	3/3

☐ Performs work gestures of the same type involving the wrist for more than 50% of the cycle?

Wrist Positions and Movements - Right Side

Extension	<input checked="" type="checkbox"/>	n/a	<input checked="" type="checkbox"/>	1/3	<input checked="" type="checkbox"/>	2/3	<input checked="" type="checkbox"/>	3/3
Flexion	<input checked="" type="checkbox"/>	n/a	<input checked="" type="checkbox"/>	1/3	<input checked="" type="checkbox"/>	2/3	<input checked="" type="checkbox"/>	3/3
Radial Deviation	<input checked="" type="checkbox"/>	n/a	<input checked="" type="checkbox"/>	1/3	<input checked="" type="checkbox"/>	2/3	<input checked="" type="checkbox"/>	3/3
Ulnar Deviation	<input checked="" type="checkbox"/>	n/a	<input checked="" type="checkbox"/>	1/3	<input checked="" type="checkbox"/>	2/3	<input checked="" type="checkbox"/>	3/3

☐ Performs work gestures of the same type involving the wrist for more than 50% of the cycle?



Extension / Flexion



Radial / Ulnar

Type of Grip and Finger Movements - Left Side

Tight Grip (1.5cm)	<input checked="" type="checkbox"/>	n/a	<input checked="" type="checkbox"/>	1/3	<input checked="" type="checkbox"/>	2/3	<input checked="" type="checkbox"/>	2/3
Pinch	<input checked="" type="checkbox"/>	n/a	<input checked="" type="checkbox"/>	1/3	<input checked="" type="checkbox"/>	2/3	<input checked="" type="checkbox"/>	2/3
Palmar Grip	<input checked="" type="checkbox"/>	n/a	<input checked="" type="checkbox"/>	1/3	<input checked="" type="checkbox"/>	2/3	<input checked="" type="checkbox"/>	2/3
Hook Grip	<input checked="" type="checkbox"/>	n/a	<input checked="" type="checkbox"/>	1/3	<input checked="" type="checkbox"/>	2/3	<input checked="" type="checkbox"/>	2/3
Keying Grip	<input checked="" type="checkbox"/>	n/a	<input checked="" type="checkbox"/>	1/3	<input checked="" type="checkbox"/>	2/3	<input checked="" type="checkbox"/>	2/3
Wide Grip (4-5cm)	<input checked="" type="checkbox"/>	n/a	<input checked="" type="checkbox"/>	1/3	<input checked="" type="checkbox"/>	2/3	<input checked="" type="checkbox"/>	2/3

☐ Performs work gestures of the same type involving the same finger(s) for at least 50% of the cycle?

☐ Holds an object in a pinch, palmar or hook grip for at least 50% of the cycle?

Type of Grip and Finger Movements - Right Side

Tight Grip (1.5cm)	<input checked="" type="checkbox"/>	n/a	<input checked="" type="checkbox"/>	1/3	<input checked="" type="checkbox"/>	2/3	<input checked="" type="checkbox"/>	2/3
Pinch	<input checked="" type="checkbox"/>	n/a	<input checked="" type="checkbox"/>	1/3	<input checked="" type="checkbox"/>	2/3	<input checked="" type="checkbox"/>	2/3
Palmar Grip	<input checked="" type="checkbox"/>	n/a	<input checked="" type="checkbox"/>	1/3	<input checked="" type="checkbox"/>	2/3	<input checked="" type="checkbox"/>	2/3
Hook Grip	<input checked="" type="checkbox"/>	n/a	<input checked="" type="checkbox"/>	1/3	<input checked="" type="checkbox"/>	2/3	<input checked="" type="checkbox"/>	2/3
Keying Grip	<input checked="" type="checkbox"/>	n/a	<input checked="" type="checkbox"/>	1/3	<input checked="" type="checkbox"/>	2/3	<input checked="" type="checkbox"/>	2/3
Wide Grip (4-5cm)	<input checked="" type="checkbox"/>	n/a	<input checked="" type="checkbox"/>	1/3	<input checked="" type="checkbox"/>	2/3	<input checked="" type="checkbox"/>	2/3

☐ Performs work gestures of the same type involving the same finger(s) for at least 50% of the cycle?

☐ Holds an object in a pinch, palmar or hook grip for at least 50% of the cycle?

FIG. 8B

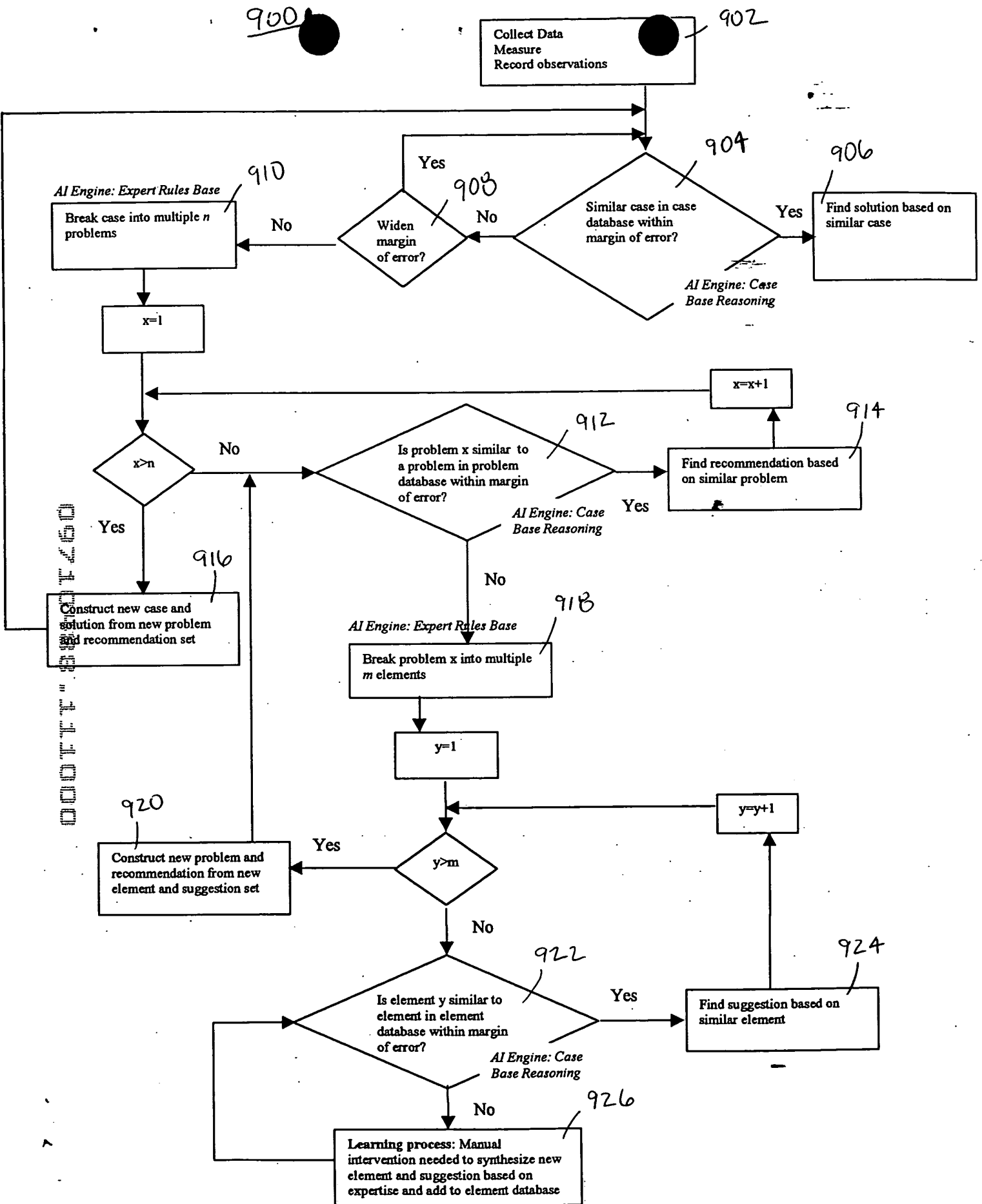


FIG. 9

1004

1002

1006

1008

1006

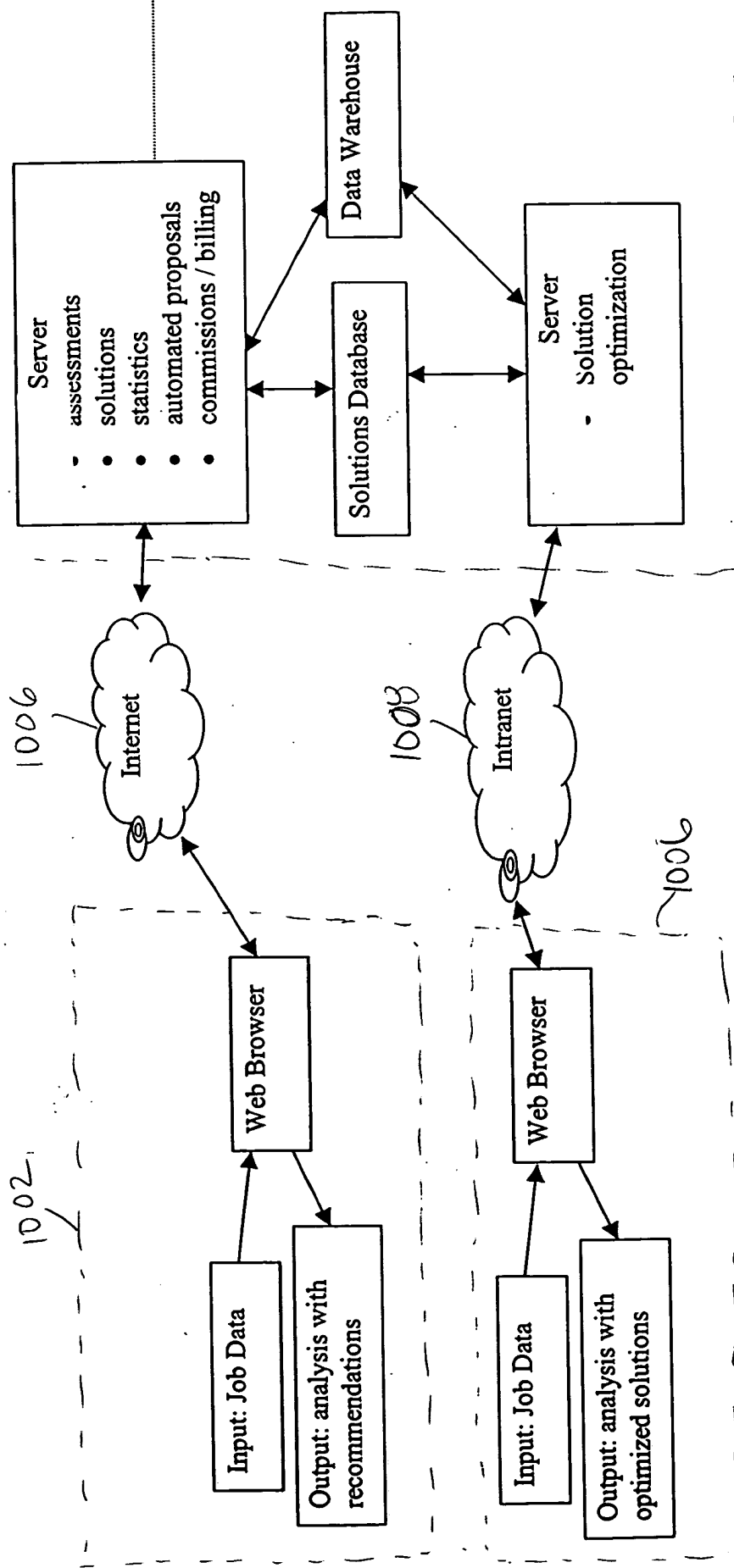


FIG 10